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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
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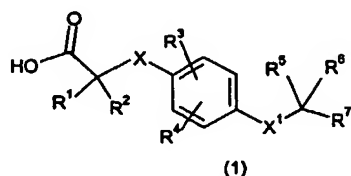
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Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PHENYLALKANOIC ACID AND PHENYLOXYALKANOIC ACID DERIVATIVES AS HPPAR ACTIVATORS



(57) Abstract: The present invention provides a compound of formula (I): wherein: R1 and R2 are independently H or C1-3 alkyl; X represents a O or (CH2)_n where n is 0, 1 or 2; R3 and R4 independently represent H, C1-3 alkyl, -OCH3, -CF3, allyl, or halogen; X1 represents O, S, SO2, SO, or CH2; R5 and R6 independently represent hydrogen, C1-6 alkyl (including branched alkyl and optionally substituted by one or more halogens or C1-6alkoxy), or together with the carbon atom to which they are bonded form a 3-6 membered cycloalkyl ring; R7 represents a phenyl or a 6 membered heteroaryl group containing 1, 2 or 3 nitrogen atoms wherein the phenyl or heteroaryl group is substituted by 1, 2 or 3 moieties selected from the group consisting of halogen, C1-6 alkoxy, C1-6 alkyl, CF3, hydroxy, or phenyl (which may be optionally substituted by one or more C1-3 alkyl, -OC1-3 alkyl, CN, acetyl, hydroxy, halogen or CF3).

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/06415

A. CLASSIFICATION OF SUBJECT MATTER

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C07C323/20 C07D213/30 C07D213/32 C07C59/66 C07C59/68
C07D213/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

CHEM ABS Data, EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 11255 A (ONO PHARMACEUTICAL CO., LTD., JAPAN) 11 March 1999 (1999-03-11) see compounds 26-157, 26-158 page 200; table 26 see compounds 26-196 and 26-197 page 201; table 27 page 192 see compounds 26-299 - 26-302 page 204	1-21
X	WO 00 64876 A (MCGEEHAN GERARD M ;MORRIS ROBERT (US); ZHANG LITAO (US); BOBKO MAR) 2 November 2000 (2000-11-02) claims 1,50-88	1-21
A	EP 1 067 109 A (ONO PHARMACEUTICAL CO) 10 January 2001 (2001-01-10) the whole document	1-21
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

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- * & * document member of the same patent family

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INTERNATIONAL SEARCH REPORT

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PCT/EP 03/06415

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 31907 A (CALLAGHAN JOHN MARK O ;GLAXO GROUP LTD (GB); COBB JEFFREY EDMOND () 4 September 1997 (1997-09-04) the whole document	1-21
X	EP 1 132 376 A (TAKEDA CHEMICAL INDUSTRIES, LTD., JAPAN) 12 September 2001 (2001-09-12) see formula (IV) page 18, line 1-9 page 37, line 1-24	1,13
P,X	GENTLES, ROBERT G. ET AL: "Standardization Protocols and Optimized Precursor Sets for the Efficient Application of Automated Parallel Synthesis to Lead Optimization: A Mitsunobu Example" JOURNAL OF COMBINATORIAL CHEMISTRY (2002), 4(5), 442-456 , XP002255800 page 454, left-hand column	1,13
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X	KUCHAR M ET AL: "BENZYLOXYARYLALIPHATIC ACIDS: SYNTHESIS AND QUANTITATIVE RELATIONS BETWEEN STRUCTURE AND ANTIINFLAMMATORY ACTIVITY" COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, ACADEMIC PRESS, LONDON, GB, vol. 47, 1982, pages 2514-2524, XP001002034 ISSN: 0010-0765 examples	1-12

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/06415

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KUCHAR M ET AL: "THE EFFECTS OF LIPOPHILICITY ON THE INHIBITION OF DENATURATION OF SERUM ALBUMIN AND ON THE ACTIVATION OF FIBRINOLYSIS OBSERVED WITH A SERIES OF BENZYLOXYARYLALIPHATIC ACIDS" COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, ACADEMIC PRESS, LONDON, GB, vol. 48, 1983, pages 1077-1088, XP001002033 ISSN: 0010-0765 examples -----	1-12
X	US 4 221 919 A (GRIMOVA JAROSLAVA ET AL) 9 September 1980 (1980-09-09) examples -----	1-12

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

Continuation of Box I.2

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claim(s) may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, a meaningful search over the whole breadth of the claim(s) is impossible. Consequently, the search has been restricted to claim 13.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/06415

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 20 and 21 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/06415

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/06415

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